

Service Area Plan

Department Of Conservation And Recreation

Dam Inventory, Evaluation and Classification and Flood Plain Management (50314)

Service Area Background Information

Service Area Description

Promote the proper design, construction, operation, and maintenance of dams to protect public safety and property and to assist communities in proper management of development in Virginia's floodplains.

Service Area Alignment to Mission

By working with communities and citizens in dam safety and floodplain management programs, we are promoting public safety and enhancing conservation of natural resources.

Service Area Statutory Authority

- The department is required to establish guidelines which will meet the minimum requirements of the National Flood Insurance Program under the National Flood Insurance Act of 1968 (42 USC §4001 et seq.). Code of Virginia, Title 10.1, Chapter 6, Article 1.
- The director may make grants or loans to certain local public bodies for the purpose of providing matching funds for flood prevention or protection, and may make regulations for the proper administration of the Flood Prevention and Protection Assistance Fund. The director, according to department developed grant and loan guidelines, may also make grants and loans to local public bodies owning dams, may make loans to private owners for the design, repair and the safety modifications of dams identified in safety reports, and may make grants to localities for the mapping and digitization of dam break inundation zones. Funding to assist localities in the development of these maps, is contingent upon the localities contributing a local match. The highest priority for awarding funds shall be placed on assisting with the mapping of the highest class of dams. Code of Virginia, Title 10.1, Chapter 6, Article 1.2.
- The department is responsible for coordinating a comprehensive flood control program for the Commonwealth. Code of Virginia, Title 10.1, Chapter 6, Article 6.
- DCR's Virginia Soil and Water Conservation Board may approve plans for capture and storage of floodwaters by riparian landowners, inspect impoundment structures, and make regulations for proper and safe construction of impoundment structures. The Board and its agents and employees are authorized to enter any property at reasonable times and under reasonable circumstances to perform such inspections and tests or to take such other actions it deems necessary to fulfill its responsibilities, including the inspection of dams, provided that the Board or its agents or employees make a reasonable effort to obtain the consent of the owner of the land prior to entry. If entry is denied, the Board or its designated agents or employees are authorized to apply to any magistrate whose territorial jurisdiction encompasses the property to be inspected or entered for a warrant authorizing such investigation, tests or other actions. Such warrant shall issue if the magistrate finds probable cause to believe that there is a dam on such property which is not known to be safe. The board is authorized to promulgate regulations to insure that impounding structures in the Commonwealth are properly and safely constructed, maintained, and operated. The board is authorized to promulgate regulations for the proper administration of the Soil and Water Conservation District Dam Maintenance, Repair, and Rehabilitation Fund. Code of Virginia, Title 10.1, Chapter 6, Article 2.
- DCR's Virginia Soil and Water Conservation Board is authorized to establish regulations for the proper administration of the Conservation, Small Watersheds Flood Control and Area Development Fund. Code of Virginia, Title 10.1, Chapter 6, Article 4.
- Federal regulations (44 CFR 59-65) apply to the Floodplain Management Program.
- National Flood Insurance Act of 1968; 42 USC §4001 et seq.

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Service Area Customer Base

Customer(s)	Served	Potential
Boards and Foundations	1	1
Citizens	500	7,000,000
Government Agencies (Federal, State, and Local)	300	310
Regulated Community	770	1,670
Soil and Water Conservation Districts	47	47
Special Customer Groups	200	500

Anticipated Changes In Service Area Customer Base

Due to changes in regulatory requirements, hundreds of additional dams are required to meet regulatory standards which is generating an increased demand for the services of dam safety engineers and central office staff.

There are approximately 15 Virginia communities that have been identified as flood-prone, but have not yet joined the National Flood Insurance Program. These communities will be invited to join the program and will be expected to increase demand for the services of the Floodplain Management Program staff.

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Service Area Partners

Boards and Foundations

Service Area Partners

Contractual Services

Service Area Partners

Educational Institutions

Virginia Colleges and Universities

Service Area Partners

Engineers and Consultants

Service Area Partners

Federal Agencies

U.S. Department of the Interior; Environmental Protection Agency; Federal Emergency Management Authority; Federal Energy Regulatory Commission; U.S. Housing and Urban Development; National Oceanographic and Atmospheric Administration; Natural Resources Conservation Service; Tennessee Valley Authority; U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service; U.S. Forest Service; U.S. Geological Survey

Service Area Partners

Local Governments

Water and Sewer Authorities; Emergency Managers; Local Planning, Zoning and Building Officials; Parks and Recreation Departments; Engineering and Public Works Officials

Service Area Partners

Non-profits

Service Area Partners

Regional Planning District Commissions

Service Area Partners

Soil and Water Conservation Districts

Service Area Partners

State Agencies

Virginia Department of Agriculture and Consumer Services; Virginia Department of Corrections; Virginia Department of Historic Resources; Virginia Department of Mines, Minerals and Energy; Virginia Department of Housing and Community Development; State Corporation Commission; Virginia Department of Emergency Management; Virginia Department of Environmental Quality; Virginia Department of Forestry; Virginia Department of Game and Inland Fisheries; Virginia Department of Health; Virginia Department of Transportation; Virginia Institute of Marine Science; Virginia Marine Resources Commission

Service Area Partners

Vendors

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Service Area Products and Services

- Permitting, Regulation, and Enforcement
- Public Safety (dam safety, law enforcement, etc.)
- Mapping funds for Dam Break Inundation Zones and Areas of Special Flood Hazards
- Regulatory Programs - Information
- Technical and Planning Assistance
- Public Education
- Financial Assistance
- Mapping Coordination and Project Management for Special Flood Hazard Areas
- Public Information

Factors Impacting Service Area Products and Services

- state funding levels
- insufficient staffing levels in key program areas
- declining federal funding levels
- expanding state and/or federal requirements

Anticipated Changes To Service Area Products and Services

- With the recent expansion of the number of dams regulated by DCR, the Department will need to expand services and products to both educate the public about Dam Safety Act requirements and to properly enforce the law.
- DCR is also considering regulatory amendments that may result in the need for further increasing services.
- Additionally, with the 2005 legislative change to the criteria governing the expenditure of funds from the Flood Prevention and Protection Assistance Fund, DCR needs to develop new grant criteria to allow for grants for dam break inundation zone mapping and to draft a dam break inundation zone model ordinance.
- With FEMA's current focus on modernizing the national inventory of flood hazard studies and mapping, DCR staff will increasingly be involved in mapping updates through 2010.
- Increased weather events create the periodic and unpredictable need for additional services from the floodplain staff.

Service Area Human Resources Summary

Service Area Human Resources Overview

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Service Area Full-Time Equivalent (FTE) Position Summary

Effective Date:

Total Authorized Position level

Vacant Positions

Non-Classified (Filled).....

Full-Time Classified (Filled)

Part-Time Classified (Filled)

Faculty (Filled)

Wage

Contract Employees

Total Human Resource Level

Factors Impacting Service Area Human Resources

Anticipated Changes in Service Area Human Resources

Service Area Financial Summary

Funding for the Dam Safety Program is primarily from Virginia's General Fund.

FEMA provides 100% funding for managing the Map Modernization Program in Virginia through the FEMA MMMS grant.

FEMA provides a portion (approximately 75%) of the funding for assisting localities with compliance and enforcement of Floodplain Management ordinances through the FEMA CAP-SSSE grants.

Department of Homeland Security/ FEMA provides a small annual Administrative Grant to DCR to support the Commonwealth's Dam Safety Program.

The Department has a documented need to add additional staff and operating funds to properly administer the expanded Dam Safety Program. Virginia's engineers are currently responsible for 277 dams each, while staff in 10 East Coast states average 130 dams per employee.

	<u>Fiscal Year 2007</u>		<u>Fiscal Year 2008</u>	
	<u>General Fund</u>	<u>Nongeneral Fund</u>	<u>General Fund</u>	<u>Nongeneral Fund</u>
Base Budget	\$635,972	\$281,876	\$635,972	\$281,876
Changes To Base	\$45,423	\$8,760	\$45,423	\$8,760
SERVICE AREA TOTAL	\$681,395	\$290,636	\$681,395	\$290,636

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Service Area Objectives, Measures, and Strategies

Objective 50314.01

Reduce potential loss of life and property damage due to severe flooding and dam failures.

Throughout Virginia, there are thousands of lives, homes, businesses and property placed at risk during floods and dam failures. DCR programs relating to the enforcement of the Virginia Dam Safety Act, the Impounding Structure Regulations, and the State and Federal Floodplain Management requirements seek to reduce such loss.

This Objective Supports the Following Agency Goals:

- Enhance public safety by administering effective dam safety and flood plain management programs.

This Objective Has The Following Measure(s):

- **Measure 50314.01.01**

Percentage of known dams regulated by Virginia with regular operation and maintenance certificates.

Measure Type: Outcome **Measure Frequency:** Annually

Measure Baseline: As of July 1, 2005, 77% of the dams known to require state certification have regular operation and maintenance certificates.

Measure Target: 79% of the dams known to require state certification will have regular operation and maintenance certificates by the end of FY06.

Measure Source and Calculation:

The number of dams that fall under state regulation dramatically increased with the adoption of state legislation effective in 2002. The legislation changed the characteristics of regulated dams to be more in line with federal guidance. DCR's division of Dam Safety and Floodplain Management maintains an inventory of all dams in Virginia and tracks compliance status. In measuring the results, staff will exclude those dams in the inventory that do not require certificates and those that we have insufficient data on to determine the status. Of the remaining dams, staff will calculate the percentage for which a current regular operation and maintenance certificate has been issued by the Virginia Soil and Water Conservation Board. Emphasis will be placed on getting high-hazard dams under state regulation.

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- **Measure 50314.01.02**

Percent of communities compliant with FEMA floodplain regulations.

Measure Type: Output

Measure Frequency: Annually

Measure Baseline: As of July 1, 2005, the National Flood Insurance Program's (NFIP) inventory indicated that 285 communities were required to be compliant with FEMA floodplain management regulations and 85% of the communities are currently compliant.

Measure Target: 95% of communities in the NFIP inventory will be compliant with local regulations that fully meet FEMA's floodplain management regulations.

Measure Source and Calculation:

DCR's Division of Dam Safety and Floodplain Management maintains a NFIP inventory of Virginia communities which tracks compliance with FEMA regulations and the number of flood insurance policies issued. By evaluating data from the inventory and using established minimum criteria, staff determines priorities for community visitation. Compliance will be based on the results of community assessment visits conducted with local officials and each community's adoption of a compliant floodplain management ordinance.

Objective 50314.01 Has the Following Strategies:

- Develop a dam break inundation zone model ordinance.
- Update and maintain inventory of dams in Virginia.
- Conduct site visits of dams.
- Review dam certificates and permit applications and make recommendations to the Virginia Soil and Water Conservation Board.
- Provide public education of the proper inspection, maintenance, and operating requirements of dams.
- Provide technical assistance, education, and outreach to localities and citizens on floodplain management and flood hazard mapping issues.
- Assist FEMA with the management and prioritization of flood mapping projects.
- Provide updates to FEMA's flood mapping needs inventory based on input from localities.